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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/650,348 08/28/2003 Daniel Ray Downing DN2001124D01 6674

27280 7590 02/26/2007  
THE GOODYEAR TIRE & RUBBER COMPANY  
INTELLECTUAL PROPERTY DEPARTMENT 823  
1144 EAST MARKET STREET  
AKRON, OH 44316-0001

EXAMINER
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PETERSON, KENNETH E

ART UNIT	PAPER NUMBER
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3724

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS 02/26/2007 PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

504

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/650,348		DOWNING, DANIEL RAY	
	<b>Examiner</b>		<b>Art Unit</b>	
	Kenneth E. Peterson		3724	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

1. Applicant's after-final amendment, received 19 January 07, has been entered. Examiner Goodman has left the office and this case has been taken over by Examiner Peterson. All indications of allowable subject matter are vacated and a new, non-final rejection follows. Examiner apologizes on behalf of the office for these rejections not having been made earlier.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-5 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In general, the details of the cutting action are not understood. The following questions should help Applicant ascertain Examiner's lack of understanding;

In paragraph 0015 is the step of "*setting a gap distance (d) above the support approximately slightly less than or equal to the thickness of the cord reinforced component*". Wouldn't the blade need to penetrate at least halfway into the cord reinforced component to engage and lift a cord as seen in figure 5B? If the gap is maintained at "*slightly less than or equal to the thickness of the cord reinforced component*", then the blade will never reach halfway into the cord reinforced component

and the cut will never be completed. If the "gap" is not maintained at "d", then there really is no gap, is there?

In paragraph 0017 is the recitation of "*a second surface oriented at an angle  $\theta_2$  greater than or equal to the skive angle  $\alpha$* ". Examiner is particularly concerned with the embodiment where  $\theta_2$  equals  $\alpha$ , in which case the blade maintains the gap "d" and the cord reinforced layer never gets cut. How is this embodiment functional to cut the tire ply?

Also in paragraph 0017 is the recitation "*the means for supporting the strip has two surfaces inclined at angles  $\theta_1$ , and  $\theta_2$  respectively,  $\theta_1$  is preferably set about  $2^\circ$  less than the skive angle  $\alpha$ , the angle  $\theta_2$  is about  $2^\circ$  more than the skive angle  $\alpha$ . In one embodiment, the skive angle  $\alpha$  is set to about  $8^\circ$* ". Examiner has numerous questions about this phrase;

a) What angle is  $\theta_1$ ? If this is just a generic representation of  $\theta_2$  and  $\theta_1$ , why mention it at all?

b) If skive angle  $\alpha$  is set to about  $8^\circ$ , and  $\theta_1$  is preferably set about  $2^\circ$  less than the skive angle  $\alpha$ , then  $\theta_1$  is about  $6^\circ$  relative to the sheet, right?. This doesn't make any sense at all when viewing figure 5A

c) If skive angle  $\alpha$  is set to about  $8^\circ$ , and  $\theta_2$  is preferably set about  $2^\circ$  more than the skive angle  $\alpha$ , then  $\theta_2$  is about  $10^\circ$  relative to something. If it is  $10^\circ$  relative to the sheet or to  $\theta_1$ , then it appears the cutting of the cord reinforced component would not occur. Furthermore, if  $\theta_2$  is different from  $\alpha$ , then the cutting

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would be always be advancing thru the layers in some direction and no "gap" would ever be maintained. This doesn't make any sense at all when viewing figure 5A-5C.

In figure 7, the manner in which angles  $\alpha$  and  $\beta$  are illustrated does not enlighten the reader as to how to make or orient the blade.

The angle  $\alpha$ , as seen in figure 8B, is about  $80^\circ$ , but is often described in the specification and claims as being the obverse, namely  $10^\circ$  or less.

4. Claims 1-5 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Examiner is required to read the claims in light of the specification. However, Examiner does not understand the specification, and therefor does not understand the scope of the claims. In particular, it is not clear how much weight should be given to the "gap" and the angles  $\theta_2$  and  $\theta_1$ .

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al.'508 in view of Benzing, II et al.'101.

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Bell discloses a method of cutting stock material comprising most of the method steps claimed including cutting the segment at a skive angle A. Note Figs. 6-7. Bell is silent as to the stock material being cord reinforced, but Benzing clearly teaches a method of cutting cord reinforced elastomeric strip material (10A) wherein during cutting, the cutter (120) impacts the cord at an angle of less than  $10^{\circ}$  (line 48, column 6). Note Figs. 3A-D and 6. Benzing at least teaches and suggests that angled cutting of cord reinforced material is known and obvious in the art. Thus, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the method of Bell et al with the cutting of cord reinforced elastomeric material at an angle of less than  $10^{\circ}$  as taught and suggested by Benzing, as an alternate way of cutting Benzing's material. Note that this alternate way is suggested by Benzing himself on lines 32-34, column 9.

As discussed above, the meaning of Applicant's "gap" is not known, and thus Bell is deemed to have a "gap" to the same extent that Applicant does.

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al.'508 in view of Benzing, II et al.'101, as set forth above, and further in view of Sergel et al.'601 or Oldeman '774.

Bell, as modified above, discloses the invention substantially as claimed except that it appears Bell's support (e.g. at 10 in Fig. 2) lacks the  $\theta_1$  and  $\theta_2$  angles as claimed. However, Sergel and Oldeman teach a step of supporting the material wherein a means for supporting (e.g. 7, 8) having a first supporting surface is disposed

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at an  $\theta_1$  greater than the skive angle (formed by blade 12 - the first surface below 12) and a second surface is oriented at an angle  $\theta_2$  greater than or equal to the skive angle for the suggestive purpose of allowing for easy separation between the cut parts of the work. See also column 3, lines 42-65. Thus, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the modified method of Bell with step of supporting having the support surfaces and angles as taught and suggested by Sergel or Oldeman in order to facilitate production of the desired bevel angle.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth E. Peterson whose telephone number is 571-272-4512. The examiner can normally be reached on Mon-Thur, 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kp



KENNETH E. PETERSON  
PRIMARY EXAMINER